The Gender Gap in Library Education

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Five directory issues of the *Journal of Education for Librarianship* covering a span of 18 years were examined in order to determine whether there are gender-related differences in teaching specialties within graduate programs of library and information science. The results of this inquiry revealed strong support for the gender-linked nature of teaching specialties within the discipline. Specifically, women tend to specialize in the teaching of services for children and young adults, cataloging, and classification, whereas men have tended to specialize in information science, research methods, library automation, and the history of books, printing, and libraries. These patterns parallel those found in the courses selected by male and female students and in the career paths of M.L.S. degree graduates. The results are discussed in terms of their implications for library educators as sex-role models.

LIBRARIANSHIP is viewed by many to be a "woman's profession" because the number of women outnumber the men in the profession by a ratio of approximately four to one. However, as is the case in other occupations, while women may be numerically dominant, the positions of power within the profession are, to a large extent, held by men. For example, 73 percent of the directors of academic libraries are men.[1] This inequitable distribution of power is reflected in salaries as well, which tend, across job categories, to be higher for men than for women.[2] In other words, there is a division or "gender gap" in the types of work performed by women and men within the profession of librarianship, and this division is reflected in an inequitable distribution by sex of prestige and salary.

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A similar situation exists in library education. As early as 1965, Carroll found that "men teaching in A.L.A. accredited graduate library schools were generally younger, higher salaried, held more advanced degrees, taught fewer different courses, held more administrative positions in their previous experiences, and earned administrative titles in their present positions in less time than women."[3] At present, although the gap in terms of actual numbers of female and male educators in North American graduate schools of library and information science is not great, the numbers are not representative of the proportion of females to males in the profession. For example, in 1983 while approximately 50 percent of the full-time faculty in ALISE member schools were males, on the basis of the number of males in the profession, one would expect that number to be closer to 20 percent.[4] Thus, within library education, relative to the total number of female educators, there are a disproportionately high number of males. Furthermore, women remain clustered in the lower academic ranks relative to men, earn lower salaries (in every rank except that of lecturer), and are less likely to be tenured than their male counterparts.[5]

The most likely reason that a large number of men have become involved in library education is that graduate level teaching is a high status activity. It is consistently true that within academe, there are many more males than females, even within disciplines in which there are a large number of female students.[6] It is also true that within the disciplines themselves, separate career paths are often followed by male and female academics. For example, Fossum reported that women law professors tend to be overrepresented in the areas of family law and legal research and writing, in spite of the progress they have made toward becoming integrated into law faculties.[7] Similarly, Kimmel reported that among psychologists, while there is a tendency for both sexes to be engaged in "applied" rather than "basic" research, this differential tendency is greater for women.[8] Furthermore, the difference in the career paths of male and female academics can be observed world-wide. For example, Over found that in Australian universities, while there are few women in academic appointments, those who are appointed tend to be concentrated in the social and behavioral sciences, and in the humanities and education.[9]

The purpose of the present investigation was to determine whether the sex of educators in library and information science is linked to areas of teaching specialization. Based on evidence from other fields, as well as from evidence within the profession itself, it was anticipated that there would be a clear relationship between the sex of faculty members, and the nature of their teaching specialities as indicated in the directory issues of

the *Journal of Education for Librarianship*. In particular, it was expected that the specialties of women would be consistent with the "service" orientation which has traditionally been a major component of women's sex roles, and that the specializations of male library school educators would be consistent with the "hard science" or "agentic" orientation which has been traditionally associated with male sex roles.[10]

Method. The *Journal of Education for Librarianship* (now *Journal of Education for Library and Information Science)* publishes an annual directory issue in which are listed faculty who teach in North American graduate schools of library and information science as well as their areas of teaching specialization. To test the hypothesis that male and female educators would have different teaching specialities, we analyzed the data listed in the following directory issues: 1965, 1971, 1975, 1980, and 1983. These issues were selected because they cover a sizeable span of time (18 years), and because new classification schemes for recording teaching specializations were introduced in 1971, 1975, 1980, and 1983. Thus, not only could we identify how teaching specialties changed over time, but how the different classification schemes were linked to "gender specialties." The 1971 classification scheme was retroactively applied to the lists of faculty teaching specialities that were listed in 1965 as there was no formal classification scheme in place at that time.

Procedure. For each directory issue, the total number of faculty members of accredited graduate schools of library and information science in North America was included. A faculty member was defined for the purpose of this investigation as any teaching member of the school. Within each year, the total number of female and male faculty members was determined, as well as the total number of females and males teaching within each category. The data were analyzed separately by year because the classification schemes were so varied from year to year.

Data Analysis. The expected numbers of male and female faculty members within each teaching specialty were calculated on the basis of the proportion of males to females in the total number of faculty members teaching in a given year. This expected value was then compared to the actual number of males and females teaching within each category. The comparison between expected and observed values across all categories was carried out by using the chi square statistic. The strength of the association was tested with the Cramer's V statistic. Where the obtained chi square value was statistically significant, that is, when the probability of obtaining an overall difference between the observed and expected values was less than .05, additional chi square tests were conducted to determine in which of the individual teaching categories these gender differences occurred.

Results. The results of the analyses revealed support for our hypothesis that, for each year included in the study, there would be a significant difference between the expected and observed number of males and females across all the teaching categories. The chi square and Cramer's V values obtained for each year are reported in Table 1. These values clearly indicate that there are gender differences in areas of teaching specialization, and that the level of association between these variables remained consistent across the years studied.

TABLE 1. *Overall Chi Square Values for the Expected Versus Observed Number of Female and Male Faculty Members per Year Across Teaching Specialties*

Year	Chi Square Value	Probability	Cramer's V
1965	178.37	.001	.40
1971	300.66	.001	.48
1975	321.79	.001	.49
1980	372.52	.001	.52
1983	269.72	.001	.45

In order to identify the specific categories within which there were a disproportionate number of male or female faculty members, individual chi square tests were performed. On the basis of these tests, female and male teaching specialties were identified for each year. These are presented in Table 2.

The results shown in Table 2 clearly indicate that there are sex differences in areas of teaching specialization, and that these differences have remained constant over the years studied. Most notable among these differences is the tendency for women to specialize in the teaching of services for children and young adults, cataloging, and classification, whereas men have tended to specialize in information science, research methods, library automation, and the history of books, printing, and libraries.

A number of teaching categories were sex-linked in some years and not others. For instance, book selection was a female teaching specialty in 1965, 1971, and 1975, was not sex-linked in 1980, and was not included as a category in the 1983 classification scheme. Similarly, communication of knowledge and ideas was a male teaching specialty only in the years 1971, 1975, and 1980, as was international comparative librarianship in 1975 and 1983, and bibliography in 1965 and 1983. Courses related to library administration and management occasionally emerged as male teaching specialties, for example, library organization and administration was a male specialty in 1975 and 1980, management theory was a male specialty

TABLE 2. *Male and Female Teaching Specialties by Year*

Year	Percent of total Male Faculty	Percent of total Female Faculty
1965		
Female Teaching Specialties		
Materials and Services for Children	4	34
Materials and Services for Young Adults	4	28
Book Selection	14	31
Male Teaching Specialties		
Special Literatures and Materials	39	22
Bibliography	30	23
Information Science and Systems	10	3
1971		
Female Teaching Specialties		
Materials and Services for Children	4	28
Materials and Services for Young Adults	4	23
Book Selection	14	21
Cataloging and Classification	13	20
Male Teaching Specialties		
Information Science and Systems	19	7
Library Automation and Data Processing	17	7
Research Methods in Librarianship	14	7
History of Books, Printing, and Libraries	14	7
Communication of Knowledge and Ideas	15	9
1975		
Female Teaching Specialties		
Materials and Services for Children	4	29
Materials and Services for Young Adults	5	22
Cataloging and Classification	10	15
Book Selection and Acquisitions	12	17
Male Teaching Specialties		
Information Science	20	9
Library Automation and Data Processing	15	7
Research Methods in Librarianship	17	10
Library Organization and Administration	34	29
Communication of Knowledge and Ideas	11	6
History of Books, Printing, and Libraries	11	6
International Comparative Librarianship	7	2
1980		
Female Teaching Specialties		
Collection for Specialized Groups	8	27
User Oriented Services for Specialized Groups	12	29
Descriptive Cataloging	6	10
Technical Services: Subject analysis	7	10

continued

TABLE 2. *Male and Female Teaching Specialties by Year — continued*

Year	Percent of total Male Faculty	Percent of total Female Faculty
Male Teaching Specialties		
Information Science	15	6
Library Automation	12	5
Systems Analysis	8	2
Quantitative Methods of Analysis	8	3
History of Libraries	8	3
Research Methods	9	5
History of Books and Printing	9	5
Communication	10	6
Data Processing	7	4
Collection: Rare books	5	1
Library Buildings	4	.05
Library Organization and Administration	11	8
Information Systems	10	7
Information Networks	9	5
Management Theory	7	4
1983		
Female Teaching Specialties		
Materials and Services for Specialized Groups	11	32
Subject Cataloging	5	12
Classification	6	11
Descriptive Cataloging	7	11
Male Teaching Specialties		
Information Science	16	7
Automation	14	6
Data Processing	10	3
Systems Analysis	10	3
Research Methods	10	3
History	14	8
Bibliography	13	8
International and Comparative Library and Information Science	7	3

in 1980, and library buildings was a male specialty in 1980. To check the pattern of non-sex-linked teaching specialties, see Table 3 for the 1983 categories.

Some of the variability in sex-linked categories from year to year is probably due to changes in the classification schemes and some confusion on the part of the respondents as to which areas of specialization to indicate as their own. However, despite these difficulties, the overall patterns of male and female teaching specialties were consistently observed over the years studied.

TABLE 3. *Non-sex-linked Teaching Specialties, 1983*

	Percent of total Male Faculty	*Percent of total Female Faculty*
Collection Development	14	11
Library and Information Services in Society	12	8
Education for Library and Information Specialists	11	8
Special Materials	23	20
Information Systems, Networking and Cooperation	11	8
Bibliographic Instruction	5	7
Preservation of Materials	5	7
Reprography	2	.03
Indexing and Abstracting	7	5
Facilities Planning	7	5
On-line Search Services	10	9
Communications	8	6
Reference	18	17
Technical Services	6	8
Introduction to Library and Information Science	11	10
Management of Libraries and Information Systems	37	38
Other	7	7
Intellectual Freedom and Censorship	5	5
Public Relations	3	3

Another noteworthy feature of the data involves the differences in the patterns of male and female teaching with respect to the total number of sex-linked categories (Table 4). Across the years studied, the males always specialized in a greater number and wider variety of teaching categories than the females. For the five years included in the study, the mean number of female teaching specialties was 3.80 (*SD* = .45), and the mean number of male teaching specialties was 7.60 (*SD* =4.56). (The mean number of non-sex-linked specialties was 18.10, *SD* = 11.34).

TABLE 4. *Proportion of Sex-linked and Non-sex-linked Teaching Specialties Over Time*

		Female Specialties		*Male Specialties*		*Non-sex-linked Specialties*	
Year	Total Number of Categories	No.	% of Total	No.	% of Total	No.	% of Total
1965	17	3	18	3	18	11	65
1971	17	4	24	5	29	8	47
1975	27	4	15	7	26	16	59
1980	56	4	7	15	27	37	66
1983	31	4	13	8	26	19	61

Discussion. The results of this investigation clearly support the hypothesis that there are male and female specializations within library education, and it appears that these have remained constant over the past 18 years. It is possible to view these sex-linked teaching specialties within the wider context of sex-role socialization. That is, as there tend to be generally acceptable patterns of male and female behavior within the culture as a whole, so, in library education there are such patterns for male and female educators. In other words, the trend for female educators to specialize in services for children is compatible with women's traditional role of child caretakers, just as the tendency for males to specialize in information science, research and quantitative methods, automation, and management is compatible with the traditional male role of "inquirer" and "builder." The so-called "hard science" specialties taught by men in library and information science faculties, are comparable to patterns of male participation in the natural and social sciences.

Furthermore, the tendency for males to have a greater number of specialty areas than females within the profession parallels the overall patterns of male and female participation in the labor force. Women tend, in general, to work in a small cluster of occupational categories and find that within these categories they are underpaid, have few opportunities for advancement, and that their jobs have little prestige.[11] Conversely, men tend to work in a wide variety of occupational categories, and relative to women, enjoy greater upward mobility, both with respect to salary and prestige.

Moving from this large picture of the labor force in which males and females play different roles, we find a similar view of males and females within library education. Not only are male teachers specialists in a wider variety of categories than women, but male and female students appear to divide themselves along the same lines. For example, Plate and Seigel reported that male M.L.S. students were more likely than females to concentrate in areas such as information science/automation, and the history of books, printing, and libraries, whereas female students were more likely to specialize in materials, and services for children and young adults.[12] These authors also reported that following graduation males were more likely than females to work in administrative positions whereas females were more likely to work in cataloging and children's services positions. Associated with these differences in job categories were salary differences which favored males.

In their discussion of the sex differences in graduates' positions and salaries, Plate and Seigel argued that males prepare themselves for administrative responsibilities by enrolling in "management oriented" courses during their graduate study, whereas female students tend to

specialize in "service oriented" courses. Although they may be correct in characterizing the nature of the female students' course involvement, it is difficult to see how studying information science, automation, and the history of books, printing, and libraries prepares male students for management positions. That is, there is nothing inherently management-related in these courses of study. What is more to the point, however, is that men are more likely than women to teach courses such as the history of the book, printing, or libraries, and that women are more likely than men to teach cataloging and children's services. In other words, the opportunity to study with educators of one's own sex may be the important dynamic in determining some students' selection of courses. Perhaps the roles modeled by male and female educators account, in part, for the sex differences observed in the career paths followed by graduates of M.L.S. programs.

Our results raise other questions that future research might address, most obviously what the factors are that maintain these patterns of specialization and what might change them to a pattern which is not gender-based. Is it the case, for example, that library school administrators, who are overwhelmingly male,[13] consciously or unconsciously influence faculty development along gender-related lines? Do female faculty members limit their own development? Do library educators, faculty and administrators alike, need programs to overcome traditional thinking comparable to those suggested for students and practitioners, such as assertiveness training[14] or a service like that offered by the Career Development and Assessment Center for Librarians?[15] Do previously documented sex-based salary and rank differentials[16] become more extreme when correlated with gender-related teaching specialties?

Whatever the answers to these questions, our study shows that the intra-occupational segregation of library and information science is not confined to the professional workplace, and, like any other form of job ghettoization, it may indicate a wasteful underutilization of expertise and experience which needs attention if the field is to be strong and healthy in future,

Summary. The results of this investigation reveal strong gender-related differences in teaching specialties in library education. These differences are consistent with the gender gap in career development which can be observed within the profession, and with the pattern of specialization among students in M.L.S. programs. The importance of these findings lies in their implications concerning the roles modeled by educators for their students. It is clear from our results that the gender gap is as pronounced within library education as it is in the professional work force; however, this finding begs the question as to whether the relationship between the two might not be a causal one.

References and Notes

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